

ABSTRACT

A permalloy sensor having high sensitivity is presented. A substrate and a sensor has a first surface having a wafer level anisotropy in a given direction. A permalloy resistor pattern of individual runners is deposited on the surface such that the mechanical length of each of said individual runners is perpendicular to the wafer level anisotropy to cause the sensor to have an anisotropy of about 90°. The permalloy is deposited as a thin film and a silicon wafer is the preferred substrate.